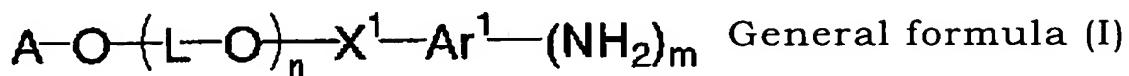


WHAT IS CLAIMED IS:

1. A polyether derivative represented by the following general formula (I):



wherein, in the general formula (I), X¹ represents -CO- or -SO₂-; Ar¹ represents unsubstituted arylene, or arylene substituted with a halogen atom, or an alkyl, alkenyl, alkynyl, alkoxy, alkoxycarbonyl, aryloxycarbonyl or cyano group; L represents alkylene; m is 1 or 2; A represents -X²-Ar²-(NH₂)_l, a hydrogen atom, or an alkyl, aryl or acyl group, wherein X², Ar² and l have the same meanings as the above-mentioned X¹, Ar¹ and m, respectively; and n is an average addition mole number of a polyether group, and is a numerical value of 10 to 500.

2. A polyether derivative according to claim 1, wherein substituent A in the general formula (I) is an alkyl, aryl or acyl group.

3. A polyether derivative according to claim 1, wherein the Ar¹ in the general formula (I) has 6 to 30 carbon atoms in all.

4. A polyether derivative according to claim 1, wherein -
 $X^1-Ar^1-(NH_2)_m$ in the general formula (I) is a 4-aminobenzoyl, 3,5-diaminobenzoyl or 4-aminobenzensulfonyl group.

5. A polyether derivative according to claim 1, wherein L in the general formula (I) is alkylene having 2 to 20 carbon atoms in all.

6. A polyether derivative according to claim 1, wherein L in the general formula (I) is selected from the group consisting of ethylene, propylene, tetramethylene, phenylethylene, cyclohexylene, vinylethylene and phenoxymethylethylene.

7. A polyether derivative according to claim 1, wherein repeating unit -(L-O)n- in the general formula (I) is selected from the group consisting of polyethylene oxide, polypropylene oxide, polytetramethylene oxide, polystyrene oxide, polycyclohexylene oxide, polyethylene oxide-polypropylene oxide block copolymer, and polyethylene oxide-polypropylene oxide random copolymer.

8. A polyether derivative according to claim 1, wherein A in the general formula (I) is an alkyl group having 1 to 30 carbon atoms in all.

9. A polyether derivative according to claim 1, wherein A in

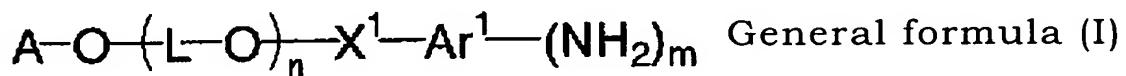
the general formula (I) is an aryl group having 6 to 30 carbon atoms in all.

10. A polyether derivative according to claim 1, wherein A in the general formula (I) is an acyl group having 2 to 30 carbon atoms in all.

11. A process for producing a polyether derivative, comprising:

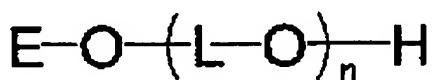
causing a polyether derivative represented by the following general formula (II) to react with an aromatic nitro compound represented by the following general formula (III); and

carrying out hydrogen reduction in the presence of a catalyst for catalytic hydrogen reduction to thereby yield a polyether derivative represented by the following general formula (I),



wherein, in the general formula (I), X¹ represents -CO- or -SO₂-; Ar¹ represents unsubstituted arylene, or arylene substituted with a halogen atom, or an alkyl, alkenyl, alkynyl, alkoxy, alkoxycarbonyl, aryloxycarbonyl or cyano group; L represents alkylene; m is 1 or 2; A represents -X²-Ar²-(NH₂)₁, a hydrogen atom,

or an alkyl, aryl or acyl group, wherein X^2 , Ar^2 and l have the same meanings as the above-mentioned X^1 , Ar^1 and m, respectively; and n is an average addition mole number of a polyether group, and is a numerical value of 10 to 500,



General formula (II)



General formula (III)

wherein, in the general formulae (II) and (III), E represents a hydrogen atom, or an alkyl, aryl or acyl group; X represents X^1 or X^2 ; Ar represents Ar^1 or Ar^2 ; p represents m or l; L represents alkylene; and n is an average addition mole number of a polyether group, and is a numerical value of 10 to 500.

12. A process for producing the polyether derivative according to claim 11, wherein an amount of the aromatic nitro compound represented by the general formula (III) used is from 1.0 to 3.0 moles per mole of hydroxyl groups of the polyether derivative represented by the general formula (II).

13. A process for producing the polyether derivative

according to claim 11, wherein for the reaction between the polyether derivative represented by the general formula (II) and the aromatic nitro compound represented by the general formula (III), a base selected from the group consisting of triethylamine, pyridine, DBU and sodium hydroxide is used.

14. A process for producing the polyether derivative according to claim 13, wherein an amount of the base used is from 1.0 to 3.0 moles per mole of hydroxyl groups of the polyether derivative represented by the general formula (II).

15. A process for producing the polyether derivative according to claim 11, wherein for the reaction between the polyether derivative represented by the general formula (II) and the aromatic nitro compound represented by the general formula (III), a solvent selected from the group consisting of toluene, acetonitrile, tetrahydrofuran and methylene chloride is used.

16. A process for producing the polyether derivative according to claim 15, wherein an amount of the solvent used is from 0.5 to 50 ml per gram of the polyether derivative represented by the general formula (II).

17. A process for producing the polyether derivative according to claim 11, wherein the reaction between the polyether

derivative represented by the general formula (II) and the aromatic nitro compound represented by the general formula (III) is conducted at a temperature of 0 to 100°C, or at a reflux temperature of a solvent used.

18. A process for producing the polyether derivative according to claim 11, wherein the polyether derivative represented by the general formula (II) is dehydrated before the reaction, and then used.

19. A process for producing the polyether derivative according to claim 11, wherein a solvent selected from the group consisting of methanol, ethanol, 2-propanol, tetrahydrofuran, and chloroform is used for the hydrogen reduction.

20. A process for producing the polyether derivative according to claim 11, wherein the hydrogen reduction is conducted at a temperature of 0 to 60°C, or at a reflux temperature of a solvent used.